

Release notes for ENDF/B Development n-039\_Y\_091  
evaluation

**ENDF**  
**B-VII**.dev

April 26, 2017

- checkr Warnings:

1. A previous error halted parsing of the current section  
*MAT=3931, MF= 1, MT=451 (1): Parsing stopped*

```
ERROR(S) FOUND IN MAT=3931, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER      236 TO      326
```

- checkr Errors:

1. A variable is outside the allowed ENDF range  
*MAT=3931, MF= 1, MT=451 (0): Variable range*

```
ERROR(S) FOUND IN MAT=3931, MF= 1, MT=451
MOD =      1 OUT OF RANGE      0 -      0      RECORD NUMBER      236
```

2. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 2, MT=151 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=3931, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY      RECORD NUMBER      328
```

3. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 1 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY      RECORD NUMBER      545
```

4. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 2 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 2
SECTION 3/ 2 NOT IN DIRECTORY      RECORD NUMBER      615
```

5. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 4 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY      RECORD NUMBER      681
```

6. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 16 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 16
SECTION 3/ 16 NOT IN DIRECTORY      RECORD NUMBER      703
```

7. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 17 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 17  
SECTION 3/ 17 NOT IN DIRECTORY RECORD NUMBER 714

8. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 22 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 22  
SECTION 3/ 22 NOT IN DIRECTORY RECORD NUMBER 721

9. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 28 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 28  
SECTION 3/ 28 NOT IN DIRECTORY RECORD NUMBER 734

10. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 32 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 32  
SECTION 3/ 32 NOT IN DIRECTORY RECORD NUMBER 745

11. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 33 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 33  
SECTION 3/ 33 NOT IN DIRECTORY RECORD NUMBER 753

12. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 51 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 51  
SECTION 3/ 51 NOT IN DIRECTORY RECORD NUMBER 761

13. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 52 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 52  
SECTION 3/ 52 NOT IN DIRECTORY RECORD NUMBER 783

14. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 53 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 53  
SECTION 3/ 53 NOT IN DIRECTORY RECORD NUMBER 804

15. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 54 (0): Directory (b)*

- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 54 |                   |
| SECTION 3/ 54 NOT IN DIRECTORY            | RECORD NUMBER 824 |
16. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 55 (0): Directory (b)*
- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 55 |                   |
| SECTION 3/ 55 NOT IN DIRECTORY            | RECORD NUMBER 843 |
17. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 56 (0): Directory (b)*
- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 56 |                   |
| SECTION 3/ 56 NOT IN DIRECTORY            | RECORD NUMBER 862 |
18. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 57 (0): Directory (b)*
- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 57 |                   |
| SECTION 3/ 57 NOT IN DIRECTORY            | RECORD NUMBER 880 |
19. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 58 (0): Directory (b)*
- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 58 |                   |
| SECTION 3/ 58 NOT IN DIRECTORY            | RECORD NUMBER 898 |
20. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 59 (0): Directory (b)*
- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 59 |                   |
| SECTION 3/ 59 NOT IN DIRECTORY            | RECORD NUMBER 915 |
21. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 60 (0): Directory (b)*
- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 60 |                   |
| SECTION 3/ 60 NOT IN DIRECTORY            | RECORD NUMBER 932 |
22. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 61 (0): Directory (b)*
- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 61 |                   |
| SECTION 3/ 61 NOT IN DIRECTORY            | RECORD NUMBER 948 |
23. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 62 (0): Directory (b)*

- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 62 |                   |
| SECTION 3/ 62 NOT IN DIRECTORY            | RECORD NUMBER 964 |
24. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 63 (0): Directory (b)*
- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 63 |                   |
| SECTION 3/ 63 NOT IN DIRECTORY            | RECORD NUMBER 979 |
25. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 64 (0): Directory (b)*
- |   |                   |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 64 |                   |
| SECTION 3/ 64 NOT IN DIRECTORY            | RECORD NUMBER 994 |
26. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 65 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 65 |                    |
| SECTION 3/ 65 NOT IN DIRECTORY            | RECORD NUMBER 1009 |
27. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 66 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 66 |                    |
| SECTION 3/ 66 NOT IN DIRECTORY            | RECORD NUMBER 1023 |
28. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 67 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 67 |                    |
| SECTION 3/ 67 NOT IN DIRECTORY            | RECORD NUMBER 1037 |
29. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 68 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 68 |                    |
| SECTION 3/ 68 NOT IN DIRECTORY            | RECORD NUMBER 1051 |
30. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 69 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 69 |                    |
| SECTION 3/ 69 NOT IN DIRECTORY            | RECORD NUMBER 1064 |
31. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 70 (0): Directory (b)*

- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 70 | RECORD NUMBER | 1077 |
| SECTION 3/ 70 NOT IN DIRECTORY            |               |      |
32. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 71 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 71 | RECORD NUMBER | 1090 |
| SECTION 3/ 71 NOT IN DIRECTORY            |               |      |
33. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 72 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 72 | RECORD NUMBER | 1102 |
| SECTION 3/ 72 NOT IN DIRECTORY            |               |      |
34. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 73 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 73 | RECORD NUMBER | 1114 |
| SECTION 3/ 73 NOT IN DIRECTORY            |               |      |
35. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 74 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 74 | RECORD NUMBER | 1126 |
| SECTION 3/ 74 NOT IN DIRECTORY            |               |      |
36. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 75 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 75 | RECORD NUMBER | 1137 |
| SECTION 3/ 75 NOT IN DIRECTORY            |               |      |
37. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 76 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 76 | RECORD NUMBER | 1148 |
| SECTION 3/ 76 NOT IN DIRECTORY            |               |      |
38. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 77 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 77 | RECORD NUMBER | 1158 |
| SECTION 3/ 77 NOT IN DIRECTORY            |               |      |
39. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 78 (0): Directory (b)*

- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 78 |                    |
| SECTION 3/ 78 NOT IN DIRECTORY            | RECORD NUMBER 1168 |
40. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 79 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 79 |                    |
| SECTION 3/ 79 NOT IN DIRECTORY            | RECORD NUMBER 1178 |
41. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT= 91 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT= 91 |                    |
| SECTION 3/ 91 NOT IN DIRECTORY            | RECORD NUMBER 1187 |
42. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT=102 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT=102 |                    |
| SECTION 3/102 NOT IN DIRECTORY            | RECORD NUMBER 1196 |
43. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT=103 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT=103 |                    |
| SECTION 3/103 NOT IN DIRECTORY            | RECORD NUMBER 1225 |
44. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT=104 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT=104 |                    |
| SECTION 3/104 NOT IN DIRECTORY            | RECORD NUMBER 1240 |
45. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT=105 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT=105 |                    |
| SECTION 3/105 NOT IN DIRECTORY            | RECORD NUMBER 1253 |
46. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 3, MT=107 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 3, MT=107 |                    |
| SECTION 3/107 NOT IN DIRECTORY            | RECORD NUMBER 1265 |
47. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 2 (0): Directory (b)*

- |  |  |                    |
|--|--|--------------------|
|  | ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 2 |                    |
|  | SECTION 4/ 2 NOT IN DIRECTORY            | RECORD NUMBER 1282 |
48. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 16 (0): Directory (b)*
- |  |   |                    |
|--|---|--------------------|
|  | ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 16 |                    |
|  | SECTION 4/ 16 NOT IN DIRECTORY            | RECORD NUMBER 1509 |
49. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 17 (0): Directory (b)*
- |  |   |                    |
|--|---|--------------------|
|  | ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 17 |                    |
|  | SECTION 4/ 17 NOT IN DIRECTORY            | RECORD NUMBER 1520 |
50. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 22 (0): Directory (b)*
- |  |   |                    |
|--|---|--------------------|
|  | ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 22 |                    |
|  | SECTION 4/ 22 NOT IN DIRECTORY            | RECORD NUMBER 1531 |
51. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 28 (0): Directory (b)*
- |  |   |                    |
|--|---|--------------------|
|  | ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 28 |                    |
|  | SECTION 4/ 28 NOT IN DIRECTORY            | RECORD NUMBER 1542 |
52. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 32 (0): Directory (b)*
- |  |   |                    |
|--|---|--------------------|
|  | ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 32 |                    |
|  | SECTION 4/ 32 NOT IN DIRECTORY            | RECORD NUMBER 1553 |
53. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 33 (0): Directory (b)*
- |  |   |                    |
|--|---|--------------------|
|  | ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 33 |                    |
|  | SECTION 4/ 33 NOT IN DIRECTORY            | RECORD NUMBER 1564 |
54. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 51 (0): Directory (b)*
- |  |   |                    |
|--|---|--------------------|
|  | ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 51 |                    |
|  | SECTION 4/ 51 NOT IN DIRECTORY            | RECORD NUMBER 1575 |
55. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 52 (0): Directory (b)*



- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 52 | RECORD NUMBER | 1600 |
| SECTION 4/ 52 NOT IN DIRECTORY            |               |      |
56. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 53 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 53 | RECORD NUMBER | 1625 |
| SECTION 4/ 53 NOT IN DIRECTORY            |               |      |
57. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 54 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 54 | RECORD NUMBER | 1650 |
| SECTION 4/ 54 NOT IN DIRECTORY            |               |      |
58. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 55 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 55 | RECORD NUMBER | 1673 |
| SECTION 4/ 55 NOT IN DIRECTORY            |               |      |
59. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 56 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 56 | RECORD NUMBER | 1696 |
| SECTION 4/ 56 NOT IN DIRECTORY            |               |      |
60. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 57 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 57 | RECORD NUMBER | 1719 |
| SECTION 4/ 57 NOT IN DIRECTORY            |               |      |
61. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 58 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 58 | RECORD NUMBER | 1742 |
| SECTION 4/ 58 NOT IN DIRECTORY            |               |      |
62. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 59 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 59 | RECORD NUMBER | 1765 |
| SECTION 4/ 59 NOT IN DIRECTORY            |               |      |
63. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 60 (0): Directory (b)*

- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 60 | RECORD NUMBER | 1788 |
| SECTION 4/ 60 NOT IN DIRECTORY            |               |      |
64. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 61 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 61 | RECORD NUMBER | 1811 |
| SECTION 4/ 61 NOT IN DIRECTORY            |               |      |
65. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 62 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 62 | RECORD NUMBER | 1834 |
| SECTION 4/ 62 NOT IN DIRECTORY            |               |      |
66. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 63 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 63 | RECORD NUMBER | 1857 |
| SECTION 4/ 63 NOT IN DIRECTORY            |               |      |
67. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 64 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 64 | RECORD NUMBER | 1880 |
| SECTION 4/ 64 NOT IN DIRECTORY            |               |      |
68. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 65 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 65 | RECORD NUMBER | 1903 |
| SECTION 4/ 65 NOT IN DIRECTORY            |               |      |
69. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 66 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 66 | RECORD NUMBER | 1926 |
| SECTION 4/ 66 NOT IN DIRECTORY            |               |      |
70. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 67 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 67 | RECORD NUMBER | 1949 |
| SECTION 4/ 67 NOT IN DIRECTORY            |               |      |
71. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 68 (0): Directory (b)*

- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 68 | RECORD NUMBER | 1972 |
| SECTION 4/ 68 NOT IN DIRECTORY            |               |      |
72. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 69 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 69 | RECORD NUMBER | 1995 |
| SECTION 4/ 69 NOT IN DIRECTORY            |               |      |
73. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 70 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 70 | RECORD NUMBER | 2018 |
| SECTION 4/ 70 NOT IN DIRECTORY            |               |      |
74. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 71 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 71 | RECORD NUMBER | 2041 |
| SECTION 4/ 71 NOT IN DIRECTORY            |               |      |
75. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 72 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 72 | RECORD NUMBER | 2064 |
| SECTION 4/ 72 NOT IN DIRECTORY            |               |      |
76. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 73 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 73 | RECORD NUMBER | 2087 |
| SECTION 4/ 73 NOT IN DIRECTORY            |               |      |
77. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 74 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 74 | RECORD NUMBER | 2110 |
| SECTION 4/ 74 NOT IN DIRECTORY            |               |      |
78. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 75 (0): Directory (b)*
- |   |               |      |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 75 | RECORD NUMBER | 2133 |
| SECTION 4/ 75 NOT IN DIRECTORY            |               |      |
79. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 76 (0): Directory (b)*

- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 76 |                    |
| SECTION 4/ 76 NOT IN DIRECTORY            | RECORD NUMBER 2156 |
80. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 77 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 77 |                    |
| SECTION 4/ 77 NOT IN DIRECTORY            | RECORD NUMBER 2179 |
81. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 78 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 78 |                    |
| SECTION 4/ 78 NOT IN DIRECTORY            | RECORD NUMBER 2202 |
82. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 79 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 79 |                    |
| SECTION 4/ 79 NOT IN DIRECTORY            | RECORD NUMBER 2225 |
83. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 4, MT= 91 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 4, MT= 91 |                    |
| SECTION 4/ 91 NOT IN DIRECTORY            | RECORD NUMBER 2248 |
84. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 5, MT= 16 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 5, MT= 16 |                    |
| SECTION 5/ 16 NOT IN DIRECTORY            | RECORD NUMBER 2272 |
85. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 5, MT= 17 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 5, MT= 17 |                    |
| SECTION 5/ 17 NOT IN DIRECTORY            | RECORD NUMBER 2326 |
86. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 5, MT= 22 (0): Directory (b)*
- |   |                    |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3931, MF= 5, MT= 22 |                    |
| SECTION 5/ 22 NOT IN DIRECTORY            | RECORD NUMBER 2359 |
87. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 5, MT= 28 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 5, MT= 28  
SECTION 5/ 28 NOT IN DIRECTORY RECORD NUMBER 2523

88. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 5, MT= 32 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 5, MT= 32  
SECTION 5/ 32 NOT IN DIRECTORY RECORD NUMBER 2618

89. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 5, MT= 33 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 5, MT= 33  
SECTION 5/ 33 NOT IN DIRECTORY RECORD NUMBER 2668

90. Missing a section in directory so your directory is messed up. This error will break everything else  
*MAT=3931, MF= 5, MT= 91 (0): Directory (b)*

ERROR(S) FOUND IN MAT=3931, MF= 5, MT= 91  
SECTION 5/ 91 NOT IN DIRECTORY RECORD NUMBER 2714

- recent Warnings:

1. Fission widths given for non-fissile nucleus, but are zero  
*0: Fission?*

```
Calculate Cross Sections from Resonance Parameters (RECENT 2015-1)
=====
Retrieval Criteria----- MAT
File 2 Mimimum Cross Section- 1.0000E-10 (Standard Option)
Reactions with No Background- Output (Resonance Contribution)
... [427 more lines]
```

- fudge-4.0 Warnings:

1. Cross section does not match sum of linked reaction cross sections  
*crossSectionSum label 0: total (Error # 0): CS Sum.*

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.79%

- fudge-4.0 Errors:

1. Calculated and tabulated Q values disagree.  
*reaction label 31: n[multiplicity:'2'] + Y90 (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -7898268.238388062 eV vs -7944890. eV!

2. Calculated and tabulated Q values disagree.  
*reaction label 32: n[multiplicity:'3'] + Y89 (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -14755298.41165161 eV vs -1.48064e7 eV!

3. Calculated and tabulated Q values disagree.  
*reaction label 33:  $n + H1 + Sr90$  (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -7661778.974136353 eV vs -7708430. eV!

4. Calculated and tabulated Q values disagree.  
*reaction label 34:  $n + H2 + Sr89$  (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -13240993.10295105 eV vs -1.32061e7 eV!

5. Calculated and tabulated Q values disagree.  
*reaction label 35:  $n + H3 + Sr88$  (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -13342478.2802124 eV vs -1.33895e7 eV!

6. Calculated and tabulated Q values disagree.  
*reaction label 36:  $Y92 + \gamma$  (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: 6570232.424118042 eV vs 6543890. eV!

7. Calculated and tabulated Q values disagree.  
*reaction label 37:  $n + He4 + Rb87$  (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -4141532.635940552 eV vs -4175690. eV!

8. Calculated and tabulated Q values disagree.  
*reaction label 38:  $H1 + Sr91\_s$  (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -1886787.18977356 eV vs -1901030. eV!

9. Calculated and tabulated Q values disagree.  
*reaction label 39:  $H2 + Sr90\_s$  (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -5437212.873199463 eV vs -5398310. eV!

10. Calculated and tabulated Q values disagree.  
*reaction label 40:  $H3 + Sr89\_s$  (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -6983760.162338257 eV vs -7020970. eV!

11. Calculated and tabulated Q values disagree.  
*reaction label 41:  $He4 + Rb88\_s$  (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: 1940987.250579834 eV vs 1906710. eV!

- njoy2012 Warnings:

1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*grouppr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)*

---message from conver---cannot do complete particle production for mt= 16  
only mf4/mf5 provided

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)*

---message from conver---cannot do complete particle production for mt= 17  
only mf4/mf5 provided

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)*

---message from conver---cannot do complete particle production for mt= 22  
only mf4/mf5 provided

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)*

---message from conver---cannot do complete particle production for mt= 28  
only mf4/mf5 provided

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)*

---message from conver---cannot do complete particle production for mt= 32  
only mf4/mf5 provided

6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (5): GROUPR/conver (0)*

---message from conver---cannot do complete particle production for mt= 33  
only mf4/mf5 provided

7. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (6): GROUPR/conver (0)*

---message from conver---cannot do complete particle production for mt= 91  
only mf4/mf5 provided